

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/001861

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl.⁷ B01J23/74, C01B3/32, H01M8/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int.Cl.⁷ B01J23/74, C01B3/32, H01M8/06

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Jitsuyo Shinan Toroku Koho	1996-2005
Kokai Jitsuyo Shinan Koho	1971-2005	Toroku Jitsuyo Shinan Koho	1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
JSTplus (JOIS)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2003-530207 A (CERAM RESEARCH LTD.), 14 October, 2003 (14.10.03), & WO 2001/076737 A1 & EP 1274505 A1 & US 2004/0074571 A1	1-9
A	JP 2003-525107 A (BASF AG.), 26 August, 2003 (26.08.03), & WO 2001/047633 A2 & EP 1250192 A1 & US 2003/004059 A1	1-9
A	JP 2003-093879 A (Ube Industries, Ltd.), 02 April, 2003 (02.04.03), (Family: none)	1-9
A	JP 5-116901 A (Hideo KAMEYAMA), 14 May, 1993 (14.05.93), (Family: none)	1-9

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance
 "E" earlier application or patent but published on or after the international filing date
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 "O" document referring to an oral disclosure, use, exhibition or other means
 "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
30 May, 2005 (30.05.05)

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14 June, 2005 (14.06.05)

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 4-214807 A (Bayer AG.), 05 August, 1992 (05.08.92), & EP 437788 A1 & US 5090997 A1	1-9
A	JP 2-279502 A (Mitsubishi Heavy Industries, Ltd.), 15 November, 1990 (15.11.90), (Family: none)	1-9
A	JP 2-141402 A (Mitsubishi Heavy Industries, Ltd.), 30 May, 1990 (30.05.90), (Family: none)	1-9
A	JP 63-209753 A (Director General, Agency of Industrial Science and Technology), 31 August, 1988 (31.08.88), (Family: none)	1-9
P,A	JP 2004-57963 A (Ube Industries, Ltd.), 26 February, 2004 (26.02.04), (Family: none)	1-9
P,X	KYO A et al., "Ni ₃ Al Kinzokukan Kagobutsu no Shokubai Kassei", The Japan Institute of Metals Koen Gaiyo", 30 March, 2004 (30.03.04), page 413	1-3,7,8
P,X	KYO A et al., "Methanol kara Suiso Seizo Hanno ni Taisuru Ni ₃ Al Kinzokukan Kagobutsu no Shokubai Kino", Dai 94 Kai Shokubai Toronkai Toronkai A Yokoshu, 27 September, 2004 (27.09. 04), page 393	1-3,7,8